



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

OFFICE OF THE
REGIONAL ADMINISTRATOR

11 MAY 1998

Lew Dodgion
Administrator
Nevada Division of Environmental Protection
Department of Conservation and Natural Resources
333 W. Nye Lane, Suite 138
Carson City, Nevada 89706-0851

Dear Mr. Dodgion:

We are providing you with information that we have recently received on locations where the chemical perchlorate may have been used in Nevada. EPA and environmental officials in your state have been working on perchlorate contamination of water resources. This information identifies a number of locations that were not previously known to us. We recommend that serious consideration be given to testing soil and water supplies which could be affected by major facilities on the enclosed lists. We also want you to be aware of a national stakeholder forum on perchlorate which will address many of the uncertainties surrounding this relatively new environmental and public health issue.

We requested information about perchlorate shipments (greater than 500 pounds in any one year) from perchlorate manufacturers, and information about major users of perchlorate from the US Air Force. As you can see from the enclosed lists, we have information on over 150 different facilities in more than 35 states where perchlorate has been used, including several in Nevada. Since the 1950s, over 870 million pounds of perchlorate have been manufactured in the US.

Perchlorate (ClO_4^-) is a man-made inorganic salt used in solid rocket fuel, in munitions and in the pyrotechnics industry. Perchlorate in its various chemical forms is essentially as soluble as table salt, can persist for decades in the environment, and easily dissolves and moves through both groundwater and surface water. Perchlorate from at least 12 separate sources has been detected in 110 public water supply wells in California and in detectable concentrations in the Colorado River. Nearly all appear to be related to solid rocket fuel manufacturing and testing. The perchlorate manufacturers estimate that approximately 90% of perchlorate is used for rocket fuel, with most of the rest used for explosives and pyrotechnics.

There remain many uncertainties concerning the toxicity and environmental effects of perchlorate. In high dosages, perchlorate interferes with thyroid activity and may have other health effects, particularly on children and sensitive populations. EPA has established a provisional reference dose in the range of 4 to 18 parts per billion in drinking water, and the State of California has set an action level of 18 ppb in public water supply.

We are also enclosing an announcement for the Interagency Perchlorate Steering Committee Stakeholder Forum which is scheduled for May 19-21 in Henderson, Nevada. Thank you for your participation in co-hosting this national forum on this relatively new environmental and public health issue.

Please feel free to contact Kevin Mayer of my staff at (415) 744-2248 if you have any questions or need additional information.

Yours,

Kevin Takai —

for Felicia Marcus
Regional Administrator